



Is alcohol really good for you?

The much-publicized beneficial effects of light to moderate alcohol consumption may have been vastly overestimated. Epidemiologists, cardiologists, public health experts and sociologists at a Novartis Foundation Symposium on Alcohol and Cardiovascular Disease in October (and at a one-day open meeting at the RSM) expressed concern that the 'J-shaped' alcohol-consumption/coronary-heart-disease-risk curve for the over 50s could be explained largely in terms of inappropriate questionnaires, misleading classifications and poor statistical analysis.

The relation between alcohol and total mortality depends on the distribution of causes of death amongst the population studied and on the level and patterns of alcohol consumption within the population. The most consistent observation is that, in industrialized countries, non-drinkers (ex-drinkers and lifelong teetotallers) have higher rates of all-cause morbidity and mortality than light/moderate drinkers¹. However, having seen little evidence that light-drinkers owe their good health to alcohol, researchers are beginning to wonder whether drinking habits are a reflection of other, more powerful, risk factors such as social class, education and general ill-health.

Despite the overwhelming consensus that, beyond a certain age, alcohol consumption of 5–20 g/day (10 g=1 UK unit) attenuates the risk of major coronary heart disease (CHD) events, the degree of protection has almost certainly been exaggerated by use of inappropriate control groups said Professor Gerry Shaper (Royal Free Hospital, London). Shaper's work on the British Regional Heart Study (a longitudinal study of over 7000 men), whose detailed meta-analysis of six other large-scale surveys has revealed that the J-shape could result largely from two factors that make non-drinkers a seriously biased baseline group². First, there is a strong downward drift from heavy or moderate drinking towards non-drinking as people get older associated with declining health; secondly, non-drinkers (like heavy drinkers) are usually working class, of limited education and in poorer health than regular light drinkers who are the healthiest, wealthiest and fittest group of all³. Taking all this into consideration Shaper concludes that the alcohol-induced reductions in CHD we are talking about are in the region of 1–3 fewer heart attacks per 1000 person years.

A minuscule benefit then, and at what cost? For individuals under 50 years of age 20 g of alcohol per day increases all-cause mortality by 15–20%⁴. Or, as Dr Peter Anderson of the World Health Organization put it, 'to talk

about alcohol as though it were some new prophylactic drug is ridiculous and dangerous. In a clinical trial it would fall at the first fence: it's addictive, it impairs neurological function, it increases the risk of violent death, suicide, hypertension, haemorrhagic stroke, cirrhosis, and many cancers and causes huge social problems. Already one-third of men, and one in ten women, in Europe drink more than 20 g per day. In the developed world alcohol is responsible for 3% of all deaths and for 7% of all potential life-years lost. Given that there is a vast panoply of very effective and under-used cardiovascular drugs and that the beneficial effects of alcohol are small and ill-understood, all those present at the Novartis Foundation meeting concurred that global recommendations such as '1–3 drinks per day are good for you' are not only meaningless but also irresponsible.

Michael Gaziano (Harvard Medical School), who works on alcohol's impressive ability to raise high density lipoprotein and thus reduce CHD risk by reverse cholesterol transport, was none the less enthusiastic: 'Even if the size of this effect is less than anticipated it could have real implications for society as a whole'. He conceded that, in terms of being able to make recommendations, researchers know about as much about alcohol as they did about cholesterol 40 years ago.

What we need now, if we are to secure information relevant to healthcare, are more large-scale, tailor-made epidemiological studies with frequent cycles involving all age groups and using modern interviewing techniques. Considering that in some studies almost twice as much alcohol is sold as people admit to consuming, there is also a crying need for a non-invasive blood-alcohol marker to winkle out the truth about how much is really drunk. Until then, the public health message should be that, whatever the effects of light drinking, heavy drinking is bad for you.

Note The full proceedings (papers and edited discussions) will be published by John Wiley & Sons, Chichester, in May 1998.

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